Hydrophiidae
Pelamis platura. Not collected during this survey. However, four beached specimens have been collected on Garden Island by Bob Goodale (pers. comm.).

DISCUSSION

Few turtles are recorded due to the southern location of the study area. Gecko species are limited; however, they are comparable to the low species richness on the adjacent mainland. A second species of Pygopodidae (*Aprasia repens*) which has been recorded on the adjacent mainland and nearby Rottnest Island, could possibly occur on Garden Island. This species may have eluded us due to its fossorial habits.

During this survey two *Tiliqua rugosa* were recorded; although no previous records are known from the island. We believe that the bobtail population on Garden Island has been in existence for a long time due to the number of sightings reported to us by the ranger and naval personnel. Whether it was introduced to the island by man cannot be determined.

Garden Island is considered to be the last stronghold of the Carpet Python (*Morelia spilota*) near Perth. The low number recorded by us may be due to our restricted survey time. The Carpet Python is a designated rare and endangered species.

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TAXONOMIC AND NATURAL HISTORY NOTES ON *TYMPANOCRYPTIS BUTLERI* AND *T. PARVICEPS*

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Tympanocryptis butleri and *T. parviceps* are small, light-coloured agamids inhabiting the light-coloured coastal sand dunes and nearby plains of central Western Australia. Both forms are considered to be closely related; so much so that they are often treated as subspecies (Storr 1977; Cogger 1983). The generic allocations of the forms have varied between *Tympanocryptis* (Storr 1964; Storr *et al.* 1983; Witten 1982 a & b; Storr and Harold 1984), *Amphibolurus* (Storr 1977; Storr and Hanlon 1980; Storr and Harold 1978, 1980) and an as yet un-named subgenus of *Amphibolurus* with *adelaidensis* and *diemensis* (Moody 1980). A critical issue in these different taxonomic allocations has been the number of

phalanges in the fifth toe of the pes: the derived number of three for inclusion in *Tympanocryptis* or the primitive number of four for allocation elsewhere. Moody (1980) reported the primitive number for *parviceps*, Witten (1983) the derived. Published information on the live animals has been limited to a brief colour note, very general habitat descriptions and statements of relative abundance (Storr and Hanlon 1980; Storr and Harold 1984). In this note I report some observations for the species on osteology (some of which bear on generic allocation), reproduction and colour.

The specimens comprise seven *Tympanocryptis butleri* from the area just east of the north-east side of False Entrance, Edel Land, Shark Bay collected 22 October 1981 (AM R 101933-34, 102488-91) and one from 48.7 km W of the turnoff to Denham via the Useless Loop Road collected on 11 February 1982 (AM R 105750), and 13 *T. parviceps* from the vicinity of Maud Hill collected 17-18 October 1981 (AM R 101758-62, 101789, 101960-64, 106979, 112035).

Figure 1. *Tympanocryptis parviceps* from the vicinity of Maud Hill, W.A. collected on 18 October 1981.

X-rays were taken of all specimens. The *Tympanocryptis butleri* had 21.5-22 (mode = 22; $\bar{x}$ = 22.0; SD = 0.29; N = 7) presacral and 38-41 ($\bar{x}$ = 39.4; SD = 1.28; N = 6); postsacral vertebrae and the *T. parviceps* 22-23 (mode = 22, $\bar{x}$ = 22.2; SD = 0.60; N = 13) and 38-42 ($\bar{x}$ = 39.7, SD = 1.27; N = 11). All specimens except one had a phalangeal formula for the manus/pes of 2.3.4.5.3/2.3.4.5.3 the derived *Tympanocryptis* condition; one *T. butleri* had 2.3.4.5.3/2.3.4.5.4 the primitive agamid condition. These vertebral counts are typical of a large number of agamids (Moody 1980); the phalangeal formula, although indicative of intra-population variation, supports the generic allocation in *Tympanocryptis*.

Field notes taken at the time of capture reveal that some specimens of *T. butleri* had "bright yellow on tip of chin" (a kodachrome slide shows this in a male) whereas *T. parviceps* had "no colour on chin or throat". Female *T. parviceps* had "pale yellow on underside of the tail" but males lacked this colour. Previously *T. butleri* had been reported to have "chin and lips bright yellow in life" (Storr 1977).

Two female *T. butleri* 42 and 45 mm SVL each carried two enlarged follicles, one in each ovary, while two *T. parviceps* 39 and 43 mm SVL carried one and two enlarged follicles, respectively. These gravid specimens were collected in October.

The small size, slightly rounded heads and slightly depressed and oval (in dorsal view) bodies of these two dragons make them very similar in appearance to species of the North American, terrestrial iguanid genus *Phrynosoma*. Our specimens, like those reported on by others, were taken on whitish to very light sandy substrates (coastal dunes and undulating country). Individuals were often seen running between clumps of shrubs.

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FROM FIELD AND STUDY

First Record of a New Zealand Great-winged Petrel *Pterodroma macroptera gouldi* (Hutton) in Western Australia — On 26 April 1985 Mr P. Lambert of the Department of Conservation and Land Management, found a dead Great-winged Petrel at Busselton, Western Australia. The bird was donated to the Western Australian Museum where it was prepared into a study skin (registered number A19561).

Details of the specimen are as follows: total length 422 mm, weight 340 g, exposed culmen 39.0 mm, entire culmen 52.5 mm, tail 126 mm, tarsus 44 mm, male with small dark testes 4 x 2 mm, skull fully ossified, legs and bill black, upperparts blackish-brown, underparts greyish-brown, the forehead, chin, throat and face light greyish-white. No wing measurement was possible because the other two primaries of both wings were moulted. The bird was in poor condition with no body or subcutaneous fat. Judging from the size of the testes and the plumage this bird was a non-breeder.

New Zealand birds differ from the nominate race in their greater size including heavier and longer bill and in having a whitish face. They breed on most islands and many headlands of the North Island, New Zealand, from the Three Kings Islands south to North Taranaki and East Cape (Falla, Sibson, and Turbott, 1975. *A Field Guide to the Birds of New Zealand*). It is a winter breeder with eggs being laid between May and August. The young and adults leave the breeding sites around November-December; so that birds are absent from the breeding grounds for only a very short period. New Zealand birds disperse west to the Tasman Sea and off the coast of New South Wales, north to about 30°S and east to the south-central Pacific Ocean (Jouanin and Mougin, 1979. *Checklist of Birds of the World*. Vol. 1). Breeding birds are fairly sedentary, and as with many seabirds it is the juveniles that travel furthest.

The nominate subspecies *Pterodroma macroptera macroptera* (Smith) breeds on Tristan da Cunha, Cough, Marion, Crozet (east) and Kerguelen Islands, and on islands off the south coast of Western Australia from Albany to Cape Arid (Jouanin and Mougin 1979). Morris, McGill and Holmes (1981 *Handlist of Birds in New South Wales*), mention that the race *gouldi* predominates off New South Wales with *P. m. macroptera* recorded only off the far south coast of that State. Cox (1976, *S.A. Orn.*, 27: 49-53) referred all South Australian specimens to the nominate subspecies. It would appear that New Zealand birds infrequently reach Western Australian seas, and still more rarely round Cape Leeuwin.

Odd specimens of Great-winged Petrel from the Albany region (but not the Archipelago of the Recherche) have the face a little paler than in typical *P. m. macroptera*, e.g. the type of *P. m. albani* Mathews. This misled Murphy and Pennoyer (1952, *Am. Mus.*